

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the listing of pending claims presented below. This listing of claims replaces all prior versions and listings of claims in the above-referenced application. In accordance with 37 C.F.R. § 1.121, as revised June 30, 2003, claims are labeled as "Original", "Currently amended", "Canceled", "Withdrawn", "Previously presented", "New", or "Not entered".

Listing of Claims

1. **(Currently Amended)** A method for treating cancer comprising administering chlorotoxin or a chlorotoxin derivative as a first agent in combination with and at least one chemotherapeutic agent as a second agent, wherein the two agents are administered simultaneously or are administered independently in a fashion that the agents will act at the same time,
wherein the chlorotoxin derivative comprises a sequence selected from the group consisting of SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8, SEQ ID No. 13, portions thereof, and combinations thereof; and
wherein the cancer is a member of the group consisting of human glioblastoma multiforme, human malignant melanoma, human prostate tumor, and human small cell lung carcinoma.
2. **(Original)** A method according to claim 1 wherein the chlorotoxin or chlorotoxin derivative is administered prior to administration of the chemotherapeutic agent.
3. **(Original)** A method according to claim 1 wherein the chlorotoxin or chlorotoxin derivative is administered subsequent to administration of the chemotherapeutic agent.
4. **(Original)** A method according to claim 1 wherein chlorotoxin or chlorotoxin derivative is administered simultaneously with the chemotherapeutic agent.
5. **(Original)** A method according to claim 1, wherein the chemotherapeutic agent is selected from the group consisting of alkylating agents, purine antagonists, pyrimidine

antagonists, plant alkaloids, intercalating antibiotics, aromatase inhibitors, anti-metabolites, mitotic inhibitors, growth factor inhibitors, cell cycle inhibitors, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones and anti-androgens.

6. **(Original)** A method according to claim 1, wherein the chemotherapeutic agent is selected from the group consisting of BCNU, cisplatin, gemcitabine, hydroxyurea, paclitaxel, temozolamide, topotecan, fluorouracil, vincristine, vinblastine, procarbazine, dacarbazine, altretamine, cisplatin, methotrexate, mercaptopurine, thioguanine, fludarabine phosphate, cladribine, pentostatin, fluorouracil, cytarabine, azacitidine, vinblastine, vincristine, etoposide, teniposide, irinotecan, docetaxel, doxorubicin, daunorubicin, dactinomycin, idarubicin, plicamycin, mitomycin, bleomycin, tamoxifen, flutamide, leuprolide, goserelin, aminoglutethimide, anastrozole, amsacrine, asparaginase, mitoxantrone, mitotane and amifostine.
7. **(Canceled)** A method according to claim 1, wherein the cancer is a neuroectodermal cancer.
8. **(Canceled)** A method according to claim 1, wherein the cancer is selected from the group consisting of lung cancer, bone cancer, liver cancer, pancreatic cancer, skin cancer, cancer of the head or neck, cutaneous or intraocular melanoma, uterine cancer, ovarian cancer, rectal cancer, cancer of the anal region, stomach cancer, colon cancer, breast cancer, uterine cancer, carcinoma of the fallopian tubes, carcinoma of the endometrium, carcinoma of the cervix, carcinoma of the vagina, carcinoma of the vulva, Hodgkin's Disease, cancer of the esophagus, cancer of the small intestine, cancer of the endocrine system, cancer of the thyroid gland, cancer of the parathyroid gland, cancer of the adrenal gland, sarcoma of soft tissue, cancer of the urethra, cancer of the penis, prostate cancer, chronic or acute leukemia, lymphocytic lymphomas, cancer of the bladder, cancer of the kidney or ureter, renal cell carcinoma, carcinoma of the renal pelvis, neoplasms of the central nervous system (CNS), neuroectodermal cancer, spinal axis tumors, glioma, meningioma and pituitary adenoma.

9. **(Currently Amended)** A composition for treating cancer comprising chlorotoxin or a chlorotoxin derivative and at least one chemotherapeutic agent,
wherein the chlorotoxin derivative comprises a sequence selected from the group consisting of SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8, SEQ ID No. 13, portions thereof, and combinations thereof.

10. **(Original)** A composition according to claim 9, wherein the chemotherapeutic agent is selected from the group consisting of alkylating agents, purine antagonists, pyrimidine antagonists, plant alkaloids, intercalating antibiotics, aromatase inhibitors, anti-metabolites, mitotic inhibitors, growth factor inhibitors, cell cycle inhibitors, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones and anti-androgens.

11. **(Original)** A composition according to claim 9, wherein the chemotherapeutic agent is selected from the group consisting of BCNU, cisplatin, gemcitabine, hydroxyurea, paclitaxel, temozolamide, topotecan, fluorouracil, vincristine, vinblastine, procarbazine, dacarbazine, altretamine, cisplatin, methotrexate, mercaptopurine, thioguanine, fludarabine phosphate, cladribine, pentostatin, fluorouracil, cytarabine, azacitidine, vinblastine, vincristine, etoposide, teniposide, irinotecan, docetaxel, doxorubicin, daunorubicin, dactinomycin, idarubicin, plicamycin, mitomycin, bleomycin, tamoxifen, flutamide, leuprolide, goserelin, aminoglutethimide, anastrozole, amsacrine, asparaginase, mitoxantrone, mitotane and amifostine.

12. **(Currently Amended)** A composition according to claim 9, wherein the cancer is a member of the group consisting of human glioblastoma multiforme, human malignant melanoma, human prostate tumor, and human small cell lung carcinoma, is a neuroectodermal cancer.

13. **(Canceled)** A composition according to claim 9, wherein the cancer is selected from the group consisting of lung cancer, bone cancer, liver cancer, pancreatic cancer, skin cancer, cancer of the head or neck, cutaneous or intraocular melanoma, uterine cancer, ovarian cancer, rectal cancer, cancer of the anal region, stomach cancer, colon cancer, breast

cancer, uterine cancer, carcinoma of the fallopian tubes, carcinoma of the endometrium, carcinoma of the cervix, carcinoma of the vagina, carcinoma of the vulva, Hodgkin's Disease, cancer of the esophagus, cancer of the small intestine, cancer of the endocrine system, cancer of the thyroid gland, cancer of the parathyroid gland, cancer of the adrenal gland, sarcoma of soft tissue, cancer of the urethra, cancer of the penis, prostate cancer, chronic or acute leukemia, lymphocytic lymphomas, cancer of the bladder, cancer of the kidney or ureter, renal cell carcinoma, carcinoma of the renal pelvis, neoplasms of the central nervous system (CNS), neuroectodermal cancer, spinal axis tumors, glioma, meningioma and pituitary adenoma.

14. **(Currently Amended)** A method for detecting the presence of cancer in a patient comprising: administering a detectable amount of labeled ~~chlorotoxin~~ or chlorotoxin derivative,
wherein the chlorotoxin derivative comprises a sequence selected from the group consisting of SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8, SEQ ID No. 13, portions thereof, and combinations thereof.

15. **(Currently Amended)** The method according to claim 14, wherein the cancer is a member of the group consisting of human glioblastoma multiforme, human malignant melanoma, human prostate tumor, and human small cell lung carcinoma, is selected from the group consisting of lung cancer, bone cancer, liver cancer, pancreatic cancer, skin cancer, cancer of the head or neck, cutaneous or intraocular melanoma, uterine cancer, ovarian cancer, rectal cancer, cancer of the anal region, stomach cancer, colon cancer, breast cancer, uterine cancer, carcinoma of the fallopian tubes, carcinoma of the endometrium, carcinoma of the cervix, carcinoma of the vagina, carcinoma of the vulva, Hodgkin's Disease, cancer of the esophagus, cancer of the small intestine, cancer of the endocrine system, cancer of the thyroid gland, cancer of the parathyroid gland, cancer of the adrenal gland, sarcoma of soft tissue, cancer of the urethra, cancer of the penis, prostate cancer, chronic or acute leukemia, lymphocytic lymphomas, cancer of the bladder, cancer of the kidney or ureter, renal cell carcinoma, carcinoma of the renal

~~pelvis, neoplasms of the central nervous system (CNS), neuroectodermal cancer, spinal axis tumors, glioma, meningioma and pituitary adenoma.~~

16. **(Original)** The method according to claim 14, wherein the label is a radiolabel.
17. **(Original)** The method according to claim 16, wherein the radiolabel is selected from the group consisting of ^3H , ^{14}C , ^{18}BF , ^{19}F , ^{31}P , ^{32}P , ^{35}S , ^{131}I , ^{125}I , ^{123}I , ^{65}Cu , ^{187}Re , ^{111}In , ^{90}Y , $^{99\text{m}}\text{Tc}$ and ^{177}Lu .